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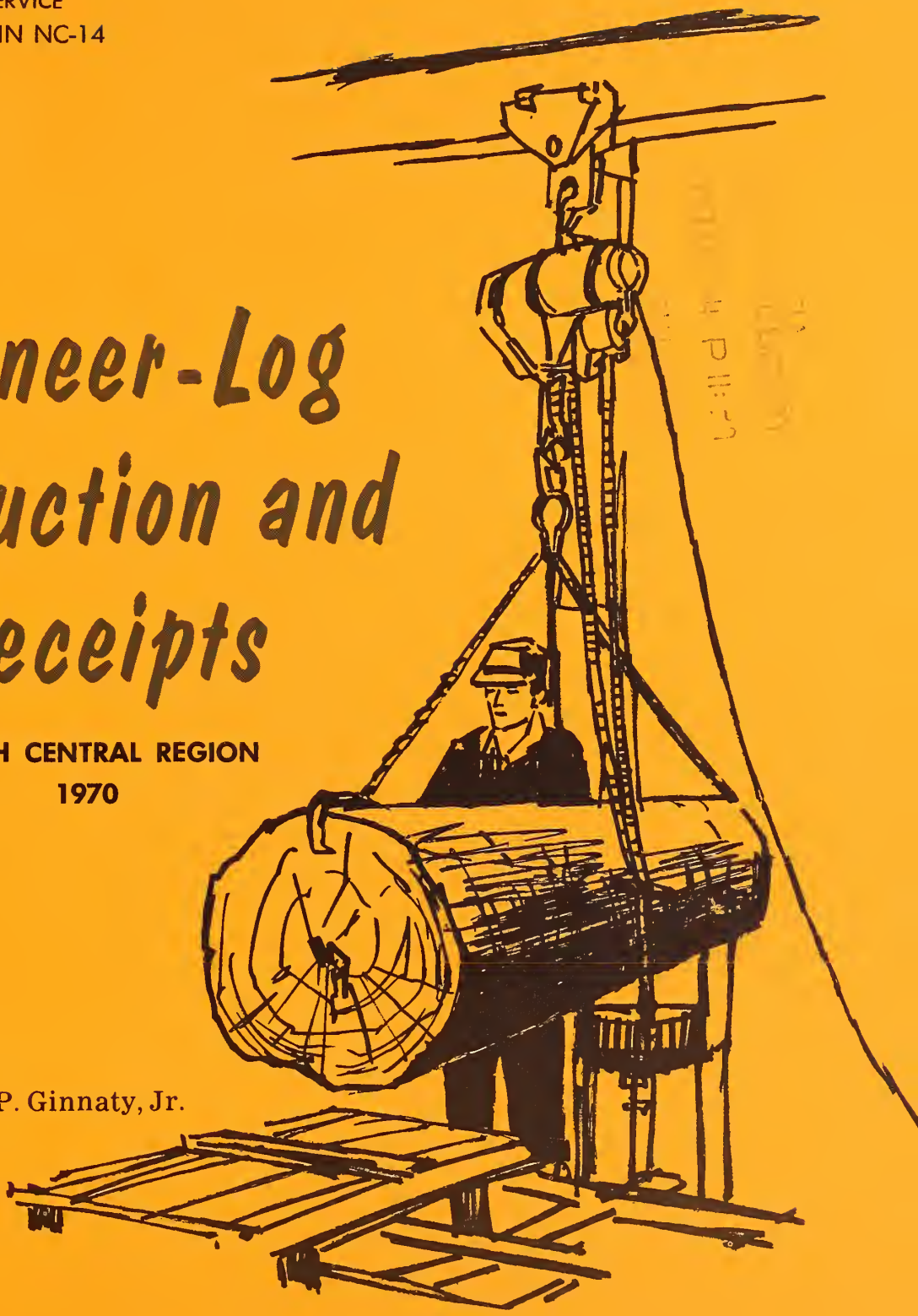
# Veneer-Log Production and Receipts

**NORTH CENTRAL REGION**
**1970**



Thomas P. Ginnaty, Jr.

NORTH CENTRAL FOREST EXPERIMENT STATION
FOREST SERVICE
U.S. DEPARTMENT OF AGRICULTURE

The author is Associate Mensurationist at the Station's Headquarters Laboratories in St. Paul, Minnesota

North Central Forest Experiment Station
D. B. King, Director
Forest Service – U.S. Department of Agriculture
Folwell Avenue
St. Paul, Minnesota 55101
(Maintained in cooperation with the University of Minnesota)

Ginnaty, Thomas P., Jr.

1972. Veneer-log production and receipts, north central region, 1970. N. Cent. Forest Exp. Sta., St. Paul, Minn. 8 p., illus. (USDA Forest Serv. Resource Bull. NC-14)

The 1970 Lake States veneer-log production and mill receipts were 34.4 and 37.0 million board feet, respectively. The Central States produced 23.5 million board feet and received 30.0 million board feet of veneer logs. Veneer-log production and mill receipts dropped substantially throughout the north central region from 1968.

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# VENEER-LOG PRODUCTION AND RECEIPTS, NORTH CENTRAL REGION, 1970

Thomas P. Ginnaty, Jr.

This report of 1970 veneer-log production[1] and receipts in the north central region is divided into two sections—Lake States (Minnesota, Wisconsin, and Michigan) and Central States (Indiana, Illinois, Iowa and Missouri) — because different species are grown and used as veneer logs in each area. In the Lake States, hard maple, elm, basswood, red oak, and yellow birch dominate; in the Central States, the hickories, oaks, and black walnut are more common.

Cooperation from the 43 standard[2] and 22 container[3] veneer mills in the region made this report possible (fig. 1). All but two mills reported their 1970 receipts by species and State of origin. Receipts were estimated for the nonresponding mills. Two mills are not included in this report to avoid disclosure of their operations (table 1). One of these mills is new and the other has never been included in previous reports. Export data are not reported except those to Canada.

Six container mills have closed since the 1968 veneer log production and receipts report.[4] Two other container mills shifted to standard veneer products. Two standard veneer mills have closed since 1968. Curtailing of mill operations in 1970 was common.

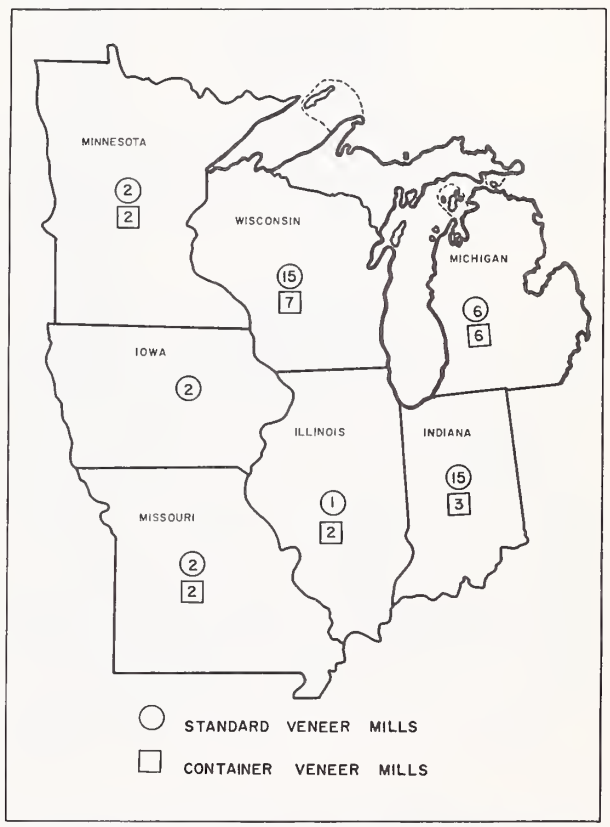


*Figure 1.—Distribution of active veneer mills in the North Central States by State and type of mill, 1970.*

## LAKE STATES

Total veneer-log production declined between 1948 and 1958, and then leveled off for a few years until 1965. Since 1965 the trend has again been downward (fig. 2). The first decline probably can be attributed to substitute materials

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[1] *Production is the volume of veneer logs cut from a specific area; receipts are the volume of veneer logs received by mills in a specific area regardless of geographic source.*

[2] *Commercial, face, and specialty veneer mills that manufacture veneer used in doorskins, furniture, wall panels, specialty plywood, and similar items.*

[3] *Mills that manufacture veneers used in boxes, baskets, crates, packing cases and other wood-veneer containers.*

[4] *Thomas P. Ginnaty, Jr. Veneer-log production and receipts, north central region, 1968. USDA Forest Serv. Resource Bull. NC-10, 8 p., illus. N. Cent. Forest Exp. Sta., St. Paul, Minn. 1970.*

*Table 1.—Active veneer mills in the North Central States by state and type of mill, 1970*

| Type of mill | Name of mill | Location |
|---|---|---|
| | MINNESOTA | |
| Standard | Diamond National Co.[1/] | Cloquet |
| | Wahkon Veneer Mills | Wahkon |
| Container | Bren Berry Box Mfg. Co. | Hopkins |
| | Elk River Box Co. | Elk River |
| | WISCONSIN | |
| Standard | Birchwood Lumber & Veneer Co. | Birchwood |
| | Birchwood Mfg. Co. | Rice Lake |
| | Calumet & Hecla, Inc. | Goodman |
| | Calumet & Hecla, Inc. | Mellen |
| | Eggers Plywood Co. | Two Rivers |
| | General Plywood Corp. | Antigo |
| | Gillette Veneer & Plywood Co. | Gillett |
| | Hatley Veneer Co., Inc. | Hatley |
| | Larson Plywood Co., Inc. | Sheboygan |
| | Linwood, Inc. | Gillett |
| | Marion Plywood Corp. | Marion |
| | U.S. Plywood Corp. | Algoma |
| | Weber Veneer & Plywood Co. | Showano |
| | Weyerhaeuser Co. | Marshfield |
| | Wisconsin Timber & Land Co. | Mattoon |
| Container | Brunette Box & Veneer Co. | Rice Lake |
| | Dufeck Mfg. Co. | Denmark |
| | Ebner Box Factory | Cameron |
| | Konz Container Co. | Howard Grove |
| | Seymour Woodenware Co. | Seymour |
| | Standard Container Co. | Edgar |
| | Wauzeka Box Co. | Wauzeka |
| | MICHIGAN | |
| Standard | Anthony & Co. | Escanaba |
| | Birdseye Veneer & Plywood Co. | Escanaba |
| | Iron Wood Products[1/] | Bessemer |
| | Manthei Bros. | Petoskey |
| | Plycoma Veneer Co. | Nashville |
| | Soo Veneer Co. | Sault Ste. Marie |
| Container | A. C. Hensel Mfg. Co. | Augusta |
| | American Made Veneer | Kalkaska |
| | Nelson R. Anderson Co. | Stevensville |
| | Fruit Growers Package Co. | Paw Paw |
| | Michigan Crate & Basket | Shelby |
| | Riverside Package Co. | Riverside |
| | IOWA | |
| Standard | R. S. Bacon Veneer Co. | Dubuque |
| | Spencer Hardwood Lumber Co. | Spencer |
| | MISSOURI | |
| Standard | Enterprise Veneer Corp. | Pleasant Hill |
| | Missouri Valley Walnut Co. | St. Joseph |
| Container | Betz Tipton Veneer Co. | Caruthersville |
| | Crumbliss Wood Products | Neosho |
| | ILLINOIS | |
| Standard | Swords Veneer & Lumber Co. | Rock Island |
| Container | Cobden Box & Basket Co. | Cobden |
| | Main Brothers Box & Lbr. Co. | Karnak |
| | INDIANA | |
| Standard | Amos-Thompson Corp. | Edinburg |
| | B. L. Curry & Sons | New Albany |
| | Central Veneer, Inc. | Indianapolis |
| | Chester B. Stem, Inc. | New Albany |
| | Curry Miller Veneers, Inc. | Indianapolis |
| | David R. Webb, Co. | Edinburg |
| | Evansville Veneer Co. | Evansville |
| | Hill Bros. Veneer Co., Inc. | Edinburg |
| | Hoosier Veneer Co., Inc. | Indianapolis |
| | Jasper Veneer Mills | Jasper |
| | Mitchell Industries | Greensburg |
| | National Veneer & Lumber Co. | Seymour |
| | Pierson-Holowell Co., Inc. | Lawrenceburg |
| | Roberts & Strack Veneer Co. | Clarksville |
| | Theising Veneer Co., Inc. | Mooresville |
| Container | Farrel Box Co., Inc. | Decker |
| | New Albany Box & Basket Co.,Inc. | New Albany |
| | W. C. Redmon Sons, Inc. | Peru |

1/ Receipts not recorded to avoid disclosure of operations of this mill.

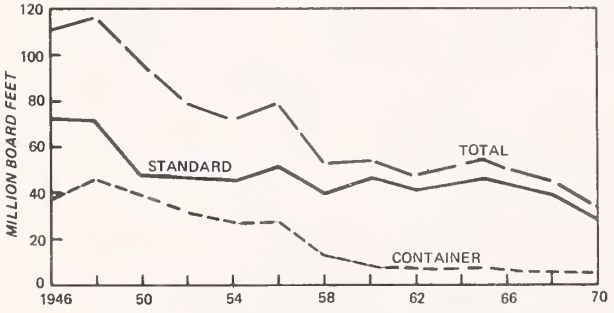


*Figure 2.—Veneer-log production by year and type of industry, Lake States, 1946-1970.*

capturing the traditional markets of the container veneer industry. Container veneer-log production leveled off in 1960 and remained stable through 1970, possibly because the mills are near the raw material source and suitable markets. This stabilization, coupled with a relatively steady standard veneer-log production, caused a firming of total veneer-log production between 1958 and 1965. A downward trend began in 1966, largely due to a reduction in thickness of veneer cut. This decline continued until by 1970 standard and total veneer-log production had decreased by a third as compared with 1965 production. The reasons for the decline most mentioned by the mill operators were the introduction of the print process[5] and increased foreign competition.

Comparison of veneer-log production and receipts figures from 1946 to 1970 shows that the Lake States veneer industry is depending less on outside log sources and procures most of its logs within the three Lake States.

## Production

Loggers harvested 34.4 million board feet[6] of veneer logs in 1970, only 75 percent of the 1968

[5] *A manufacturing process that "prints" simulated natural wood finish on plastic, vinyl, hardboard, or nonfigured plywood panels.*

[6] *International ¼-inch log rule.*

production. Most of the volume (29.4 million board feet) was cut for manufacture into standard veneer. Hard maple, red oak, and yellow birch were the principal species. The remainder, largely cottonwood and elm, were logged for manufacturing container veneer[7] (table 2).

*Table 2.—Container veneer-log and bolt production and receipts by species and State, Lake States, 1970*

(Thousand board feet, International ¼-inch rule)

| Species and destination | Production | | | Mill Receipts |
|---|---|---|---|---|
| | Minnesota | Wisconsin | Michigan | |
| Cottonwood: | | | | |
| Minnesota | (1/) | -- | -- | (1/) |
| Wisconsin | 315 | 101 | -- | 416 |
| Michigan | -- | -- | 499 | 499 |
| Total | 315 | 101 | 499 | 915 |
| Elm: | | | | |
| Minnesota | (1/) | -- | -- | (1/) |
| Wisconsin | 525 | 1,300 | -- | 1,825 |
| Michigan | -- | -- | 602 | 602 |
| Total | 525 | 1,300 | 602 | 2,427 |
| Other hardwoods: | | | | |
| Minnesota | (1/) | -- | -- | (1/) |
| Wisconsin | 31 | 256 | -- | 287 |
| Michigan | -- | -- | 1,156 | 1,156 |
| Total | 31 | 256 | 1,156 | 1,443 |
| All species: | | | | |
| Minnesota | (1/) | -- | -- | (1/) |
| Wisconsin | 871 | 1,657 | -- | 2,528 |
| Michigan | -- | -- | 2,257 | 2,257 |
| Total | 871 | 1,657 | 2,257 | 4,785 |

1/ Not included to avoid disclosure of individual mill operations.

Wisconsin produced 15.8 million board feet of veneer logs in 1970, a 25 percent decrease since 1968 (table 3). Red oak and hard maple accounted for 33 and 20 percent, respectively, of the total production. Wisconsin mills consumed more than 90 percent of the volume produced within the State and three-fourths of the total volume produced in the Lake States.

Michigan harvested 15.0 million board feet of veneer logs. Hard maple and yellow birch (36 and 25 percent of the total) were the predominant species. Michigan exported about two-thirds of the volume produced, 49 percent of the total production going to Wisconsin mills.

[7] *An additional 1,645 cords of heading stock were cut for the container mills.*

Minnesota harvested 3.5 million board feet, one-tenth of the Lake States total. Eighty-four percent of the Minnesota production was exported to Wisconsin. The major species produced were elm, cottonwood, basswood, and red oak.

The Lake States exported 3.0 million board feet of veneer logs in 1970 (52 percent less than in 1968). Indiana mills received two-thirds of this volume. Michigan supplied three-fourths of the total volume exported. The major species exported was hard maple.

## Mill Receipts

Lake States mills received 37.0 million board feet of veneer logs in 1970, a decline of 10.6 million board feet since 1968 and 18.4 million board feet since 1966.

Hard maple log receipts showed only a slight increase since 1968 due to the end-use versatility of this species (fig. 3). Yellow birch purchases fell significantly, reflecting competition from imports and a decline in the use of this wood in cabinetmaking. Lower receipts of red oak, used mainly for paneling and doors, reflected a drop in these markets. Elm showed a substantial overall loss in 1970 due to the slackening demand by standard veneer mills for this species, although there was an increase in its use in the container industry. Elm supplies in the woods have been much reduced by disease in recent years.

Wisconsin received 30.0 million board feet of veneer logs in 1970, down from 37.6 million board feet in 1968. More than half the volume was hard maple and red oak. More than 50 percent of the logs came from within the State; Michigan supplied 7.3 million board feet (mainly hard maple and yellow birch), and Minnesota supplied 3.0 million board feet (mainly elm, red oak, and cottonwoods). Fifteen percent of the wood used in Wisconsin was imported from outside the Lake States, three-fifths of which came from Canada (mainly hard maple and yellow birch).

*Table 3.—Production and imports of veneer logs, Lake States, 1970*

*(Thousand board feet, International ¼-inch rule)*

| Species and Destination | Production (Volume of veneer logs cut in each State) | | | | Imports | | | Lake States receipts[1/] |
|---|---|---|---|---|---|---|---|---|
| | Minnesota | Wisconsin | Michigan | Region total | Other States | Canada | Total imports | |
| Aspen | | | | | | | | |
| Minnesota | 17 | -- | -- | 17 | -- | -- | -- | 17 |
| Wisconsin | 19 | 1,155 | 2 | 1,176 | -- | -- | -- | 1,176 |
| Michigan | -- | -- | 79 | 79 | -- | -- | -- | 79 |
| Outside Lake States | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 36 | 1,155 | 81 | 1,272 | -- | -- | -- | 1,272 |
| Ash | | | | | | | | |
| Minnesota | 17 | -- | -- | 17 | -- | -- | -- | 17 |
| Wisconsin | 21 | 164 | 15 | 200 | 10 | -- | 10 | 210 |
| Michigan | -- | -- | 127 | 127 | -- | -- | -- | 127 |
| Outside Lake States | -- | -- | 6 | 6 | -- | -- | -- | -- |
| Total | 38 | 164 | 148 | 350 | 10 | -- | 10 | 354 |
| Basswood | | | | | | | | |
| Minnesota | 93 | -- | -- | 93 | -- | -- | -- | 93 |
| Wisconsin | 443 | 2,026 | 224 | 2,693 | 322 | -- | 322 | 3,015 |
| Michigan | -- | -- | 462 | 462 | -- | -- | -- | 462 |
| Outside Lake States | -- | -- | 20 | 20 | -- | -- | -- | -- |
| Total | 536 | 2,026 | 706 | 3,268 | 322 | -- | 322 | 3,570 |
| Beech | | | | | | | | |
| Wisconsin | -- | 6 | 23 | 29 | -- | -- | -- | 29 |
| Michigan | -- | -- | 264 | 264 | -- | -- | -- | 264 |
| Total | -- | 6 | 287 | 293 | -- | -- | -- | 293 |
| White birch | | | | | | | | |
| Minnesota | 13 | -- | -- | 13 | -- | -- | -- | 13 |
| Wisconsin | 145 | 159 | 137 | 441 | 7 | 398 | 405 | 846 |
| Michigan | 77 | -- | 630 | 707 | -- | 361 | 361 | 1,068 |
| Outside Lake States | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 235 | 159 | 767 | 1,161 | 7 | 759 | 766 | 1,927 |
| Yellow birch | | | | | | | | |
| Wisconsin | 131 | 536 | 2,351 | 3,018 | -- | 1,133 | 1,133 | 4,151 |
| Michigan | -- | 26 | 1,386 | 1,412 | -- | 567 | 567 | 1,979 |
| Outside Lake States | -- | -- | 36 | 36 | -- | -- | -- | -- |
| Total | 131 | 562 | 3,773 | 4,466 | -- | 1,700 | 1,700 | 6,130 |
| Butternut | | | | | | | | |
| Wisconsin | -- | 3 | -- | 3 | -- | -- | -- | 3 |
| Michigan | -- | 3 | 2 | 5 | -- | -- | -- | 5 |
| Outside Lake States | 44 | 277 | -- | 321 | -- | -- | -- | -- |
| Total | 44 | 283 | 2 | 329 | -- | -- | -- | 8 |
| Black cherry | | | | | | | | |
| Wisconsin | 2 | 28 | 6 | 36 | 1 | -- | 1 | 37 |
| Michigan | -- | -- | 31 | 31 | -- | -- | -- | 31 |
| Outside Lake States | -- | 5 | 29 | 34 | -- | -- | -- | -- |
| Total | 2 | 33 | 66 | 101 | 1 | -- | 1 | 68 |
| Cottonwood | | | | | | | | |
| Minnesota | 85 | -- | -- | 85 | -- | -- | -- | 85 |
| Wisconsin | 591 | 126 | -- | 717 | 97 | -- | 97 | 814 |
| Michigan | -- | -- | 499 | 499 | -- | -- | -- | 499 |
| Outside Lake States | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 676 | 126 | 499 | 1,301 | 97 | -- | 97 | 1,398 |

(Continued on next page)

Table 3 continued

| Species and Destination | Production (Volume of veneer logs cut in each State) | | | | Imports | | | Lake States receipts 1/ |
|---|---|---|---|---|---|---|---|---|
| | Minnesota | Wisconsin | Michigan | Region total | Other States | Canada | Total imports | |
| Elm | | | | | | | | |
| Minnesota | 40 | -- | -- | 40 | -- | -- | -- | 40 |
| Wisconsin | 893 | 1,880 | 126 | 2,899 | 46 | -- | 46 | 2,945 |
| Michigan | -- | 30 | 772 | 802 | 33 | -- | 33 | 835 |
| Outside Lake States | 34 | -- | -- | 34 | -- | -- | -- | -- |
| Total | 967 | 1,910 | 898 | 3,775 | 79 | -- | 79 | 3,820 |
| Hickory | | | | | | | | |
| Michigan | -- | -- | 6 | 6 | 148 | -- | 148 | 154 |
| Outside Lake States | -- | -- | 15 | 15 | -- | -- | -- | -- |
| Total | -- | -- | 21 | 21 | 148 | -- | 148 | 154 |
| Sugar and black maple | | | | | | | | |
| Minnesota | 43 | 11 | 11 | 65 | -- | -- | -- | 65 |
| Wisconsin | 120 | 3,195 | 3,576 | 6,891 | 287 | 1,040 | 1,327 | 8,218 |
| Michigan | -- | -- | 724 | 724 | -- | -- | -- | 724 |
| Outside Lake States | 25 | -- | 1,077 | 1,102 | -- | -- | -- | -- |
| Total | 188 | 3,206 | 5,388 | 8,782 | 287 | 1,040 | 1,327 | 9,007 |
| Red and silver maple | | | | | | | | |
| Minnesota | 27 | -- | -- | 27 | 32 | -- | 32 | 59 |
| Wisconsin | 71 | 506 | 119 | 696 | 52 | -- | 52 | 748 |
| Michigan | -- | -- | 104 | 104 | -- | -- | -- | 104 |
| Outside Lake States | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 98 | 506 | 223 | 827 | 84 | -- | 84 | 911 |
| Red oak | | | | | | | | |
| Minnesota | 1 | -- | -- | 1 | -- | -- | -- | 1 |
| Wisconsin | 501 | 5,214 | 766 | 6,481 | 924 | 132 | 1,056 | 7,537 |
| Michigan | -- | 11 | 76 | 87 | 25 | -- | 25 | 112 |
| Outside Lake States | -- | 11 | 250 | 261 | -- | -- | -- | -- |
| Total | 502 | 5,236 | 1,092 | 6,830 | 949 | 132 | 1,081 | 7,650 |
| White oak | | | | | | | | |
| Wisconsin | 5 | 134 | -- | 139 | -- | -- | -- | 139 |
| Michigan | -- | 9 | 34 | 43 | 15 | -- | 15 | 58 |
| Outside Lake States | -- | -- | 108 | 108 | -- | -- | -- | -- |
| Total | 5 | 143 | 142 | 290 | 15 | -- | 15 | 197 |
| Walnut | | | | | | | | |
| Michigan | -- | -- | -- | -- | -- | -- | -- | -- |
| Outside Lake States | 31 | 283 | 245 | 559 | -- | -- | -- | -- |
| Total | 31 | 283 | 245 | 559 | -- | -- | -- | -- |
| Misc. species | | | | | | | | |
| Wisconsin | 9 | 16 | 2 | 27 | 1 | -- | 1 | 28 |
| Michigan | -- | -- | 203 | 203 | 25 | -- | 25 | 228 |
| Outside Lake States | -- | -- | 496 | 496 | -- | -- | -- | -- |
| Total | 9 | 16 | 701 | 726 | 26 | -- | 26 | 256 |
| All species | | | | | | | | |
| Minnesota | 336 | 11 | 11 | 358 | 32 | -- | 32 | 390 |
| Wisconsin | 2,951 | 15,148 | 7,347 | 25,446 | 1,747 | 2,703 | 4,450 | 29,896 |
| Michigan | 77 | 79 | 5,399 | 5,555 | 246 | 928 | 1,174 | 6,729 |
| Outside Lake States | 134 | 576 | 2,282 | 2,992 | -- | -- | -- | -- |
| Total | 3,498 | 15,814 | 15,039 | 34,351 | 2,025 | 3,631 | 5,656 | 37,015 |

1/ Production minus exports plus imports.

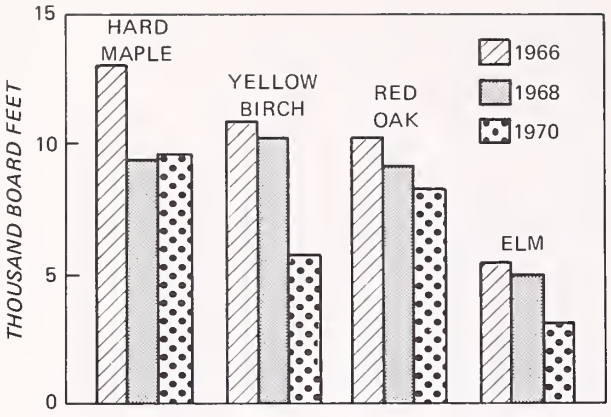


*Figure 3.—Veneer-log receipts in Lake States by major species.*

Michigan received 6.7 million board feet of veneer logs, of which 80 percent came from within the State. Yellow birch and paper birch were the predominant species.

*Table 4.—Disposition of primary plant residue by type and by volume of mill receipts, Lake States, 1970*

*(In percent)*

| Use | Residue | | |
|---|---|---|---|
| | Bark | Veneer cores | Veneer clipping |
| Manufacture of pulp, hardboard, or roofing felt: | -- | 19 | 9 |
| Industrial fuel: | 87 | 60 | 77 |
| Domestic fuel: | (1/) | 1 | -- |
| Small dimension or specialty items: | -- | 16 | (1/) |
| Not used: | 13 | 4 | 14 |
| Total | 100 | 100 | 100 |

1/ Less than 0.5 percent

Minnesota's mills procured 0.4 million board feet of veneer logs. One Minnesota mill changed from producing container veneer to standard veneer (table 1).

### Mill Residues

The residues of veneer mills in the Lake States, such as bark, veneer cores, and veneer clippings, were largely used as commercial or domestic fuels. However, 38 percent of the volume of veneer cores was used in the manufacture of fiber products such as pulp, hardboard, and roofing felt (table 4).

## CENTRAL STATES

### Production

Veneer-log production dropped to 23.5 million board feet in 1970 from 37.0 million board feet in 1968 (table 5). Although this 36 percent reduction was not uniform in each State, production in every State declined, Iowa and Missouri were affected most, possibly because of the relatively long distance to receiving mills. During slack market periods, veneer mills tend to purchase their logs nearer the mill.

Walnut and cottonwood accounted for 35 and 20 percent of the 1970 veneer-log production, respectively. Walnut, hickory, white and red oak harvests all showed a sharp drop from 1968, probably due to the increasing popularity of synthetic prints, changing furniture styles, and foreign competition. Cottonwood, sycamore, and soft maple were the species used primarily by the container veneer industry (table 6).

### Mill Receipts

Mill receipts in the Central States were 28.0 million board feet in 1970, a 43 percent reduction from 1968 (fig. 4). All major species were affected. The mill operators cited foreign competition and increased use of plastic and vinyl prints in the production of panels and furniture as the reasons for this reduction.

### Mill Residues

Veneer mill residues were used largely for industrial fuel (table 7). Nine percent of the fine residues (veneer clippings) and 19 percent of the course residues (veneer cores) were used in manufacture of fiber products. Sixteen percent of the veneer cores were used in small dimension or specialty items.

*Table 5.—Production and imports of veneer logs, Central States, 1970*

(Thousand board feet, International ¼-inch rule)

| Species | Destination | Production | | | | | Imports | | | Central States receipts[1] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Indiana | Illinois | Iowa | Missouri | Region total | Other States | Canada | Total imports | |
| Ash | Indiana | 174 | 6 | -- | -- | 180 | 151 | -- | 151 | 331 |
| | Other Central States[2] | -- | -- | 75 | 22 | 97 | 6 | -- | 6 | 103 |
| | Outside Central States | 3 | -- | 10 | 6 | 19 | -- | -- | -- | -- |
| | Total | 177 | 6 | 85 | 28 | 296 | 157 | -- | 157 | 434 |
| Basswood | Indiana | -- | -- | -- | -- | -- | 20 | -- | 20 | 20 |
| | Other Central States[2] | -- | -- | 5 | -- | 5 | -- | -- | -- | 5 |
| | Outside Central States | -- | 21 | 296 | -- | 317 | -- | -- | -- | -- |
| | Total | -- | 21 | 301 | -- | 322 | 20 | -- | 20 | 25 |
| Black cherry | Indiana | 57 | -- | -- | -- | 57 | 132 | -- | 132 | 189 |
| | Other Central States[2] | -- | -- | 1 | -- | 1 | -- | -- | -- | 1 |
| | Outside Central States | 19 | -- | 1 | -- | 20 | -- | -- | -- | -- |
| | Total | 76 | -- | 2 | -- | 78 | 132 | -- | 132 | 190 |
| Butternut | Indiana | 7 | 3 | 66 | 3 | 79 | 324 | -- | 324 | 403 |
| | Other Central States[2] | -- | -- | 49 | -- | 49 | -- | -- | -- | 49 |
| | Outside Central States | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | Total | 7 | 3 | 115 | 3 | 128 | 324 | -- | 324 | 452 |
| Cottonwood | Indiana | 1,118 | -- | -- | -- | 1,118 | 104 | -- | 104 | 1,222 |
| | Other Central States[2] | 122 | 1,684 | -- | 705 | 2,511 | 1,016 | -- | 1,016 | 3,527 |
| | Outside Central States | -- | -- | 1,121 | -- | 1,121 | -- | -- | -- | -- |
| | Total | 1,240 | 1,684 | 1,121 | 705 | 4,750 | 1,120 | -- | 1,120 | 4,749 |
| Elm | Indiana | 51 | -- | -- | -- | 51 | 5 | -- | 5 | 56 |
| | Other Central States[2] | -- | -- | 398 | 22 | 420 | -- | -- | -- | 420 |
| | Outside Central States | -- | -- | 85 | -- | 85 | -- | -- | -- | -- |
| | Total | 51 | -- | 483 | 22 | 556 | 5 | -- | 5 | 476 |
| Gum | Indiana | 458 | 43 | -- | -- | 501 | 117 | -- | 117 | 618 |
| | Other Central States[2] | 8 | 121 | -- | 37 | 166 | 47 | -- | 47 | 213 |
| | Outside Central States | -- | -- | -- | 2 | 2 | -- | -- | -- | -- |
| | Total | 466 | 164 | -- | 39 | 669 | 164 | -- | 164 | 831 |
| Hickory | Indiana | 139 | 115 | -- | 33 | 287 | 1,622 | -- | 1,622 | 1,909 |
| | Other Central States[2] | -- | 103 | 361 | 468 | 932 | 153 | -- | 153 | 1,085 |
| | Outside Central States | 149 | 20 | -- | 128 | 297 | -- | -- | -- | -- |
| | Total | 288 | 238 | 361 | 629 | 1,516 | 1,775 | -- | 1,775 | 2,994 |
| Sugar and black maple | Indiana | 309 | 18 | -- | -- | 327 | 938 | 66 | 1,004 | 1,331 |
| | Other Central States[2] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | Outside Central States | 174 | 3 | 292 | -- | 469 | -- | -- | -- | -- |
| | Total | 483 | 21 | 292 | -- | 796 | 938 | 66 | 1,004 | 1,331 |
| Red and silver maple | Indiana | 130 | -- | -- | -- | 130 | 11 | -- | 11 | 141 |
| | Other Central States[2] | 22 | 180 | 13 | 116 | 331 | 140 | -- | 140 | 471 |
| | Outside Central States | -- | -- | 84 | 5 | 89 | -- | -- | -- | -- |
| | Total | 152 | 180 | 97 | 121 | 550 | 151 | -- | 151 | 612 |
| Red oak | Indiana | 92 | 13 | -- | -- | 105 | 257 | -- | 257 | 362 |
| | Other Central States[2] | 7 | 53 | 333 | 39 | 432 | 47 | -- | 47 | 479 |
| | Outside Central States | 25 | 120 | 597 | -- | 742 | -- | -- | -- | -- |
| | Total | 124 | 186 | 930 | 39 | 1,279 | 304 | -- | 304 | 841 |
| White oak | Indiana | 1,206 | 172 | -- | 19 | 1,397 | 567 | -- | 567 | 1,964 |
| | Other Central States[2] | -- | -- | -- | 1 | 1 | -- | -- | -- | 1 |
| | Outside Central States | 255 | -- | -- | 10 | 265 | -- | -- | -- | -- |
| | Total | 1,461 | 172 | -- | 30 | 1,663 | 567 | -- | 567 | 1,965 |
| Sycamore | Indiana | 1,049 | -- | -- | -- | 1,049 | 52 | -- | 52 | 1,101 |
| | Other Central States[2] | 7 | 142 | -- | 62 | 211 | 50 | -- | 50 | 261 |
| | Outside Central States | -- | -- | -- | 42 | 42 | -- | -- | -- | -- |
| | Total | 1,056 | 142 | -- | 104 | 1,302 | 102 | -- | 102 | 1,362 |
| Yellow poplar | Indiana | 780 | -- | -- | -- | 780 | 249 | -- | 249 | 1,029 |
| | Other Central States[2] | -- | 22 | -- | 4 | 26 | -- | -- | -- | 26 |
| | Outside Central States | -- | -- | 1 | 42 | 43 | -- | -- | -- | -- |
| | Total | 780 | 22 | 1 | 46 | 849 | 249 | -- | 249 | 1,055 |
| Walnut | Indiana | 3,762 | 1,543 | 380 | 713 | 6,398 | 1,912 | -- | 1,912 | 8,310 |
| | Other Central States[2] | -- | 299 | 405 | 499 | 1,203 | 465 | -- | 465 | 1,668 |
| | Outside Central States | 532 | -- | -- | 6 | 538 | -- | -- | -- | -- |
| | Total | 4,294 | 1,842 | 785 | 1,218 | 8,139 | 2,377 | -- | 2,377 | 9,978 |
| Misc. species | Indiana | 609 | -- | -- | -- | 609 | 24 | -- | 24 | 633 |
| | Other Central States[2] | -- | -- | 14 | -- | 14 | 14 | -- | 14 | 28 |
| | Outside Central States | -- | -- | 7 | 11 | 18 | -- | -- | -- | -- |
| | Total | 609 | -- | 21 | 11 | 641 | 38 | -- | 38 | 661 |
| All species | Indiana | 9,941 | 1,913 | 446 | 768 | 13,068 | 6,485 | 66 | 6,551 | 19,619 |
| | Other Central States[2] | 166 | 2,604 | 1,654 | 1,975 | 6,399 | 1,938 | -- | 1,938 | 8,337 |
| | Outside Central States | 1,157 | 164 | 2,494 | 252 | 4,067 | -- | -- | -- | -- |
| | Total | 11,264 | 4,681 | 4,594 | 2,995 | 23,534 | 8,423 | 66 | 8,489 | 27,956 |

1/ Production minus exports plus imports
2/ Illinois, Iowa and Missouri

*Table 6.—Production and imports of container veneer logs, Central States, 1970*

*(Thousand board feet, International ¼-inch rule)*

| Species and destination | Production | | | | | Imports | | | Central States receipts[1/] |
|---|---|---|---|---|---|---|---|---|---|
| | Indiana | Illinois | Iowa | Missouri | Region total | Other states | Canada | Total | |
| Cottonwood: | | | | | | | | | |
| Indiana | 1,042 | -- | -- | -- | 1,042 | 104 | -- | 104 | 1,146 |
| Other Central States[2/] | 122 | 1,684 | -- | 705 | 2,511 | 1,016 | -- | 1,016 | 3,527 |
| Outside Central States | -- | -- | 1,035 | -- | 1,035 | -- | -- | -- | -- |
| Total | 1,164 | 1,684 | 1,035 | 705 | 4,588 | 1,120 | -- | 1,120 | 4,673 |
| Red and silver maple: | | | | | | | | | |
| Indiana | 31 | -- | -- | -- | 31 | 11 | -- | 11 | 42 |
| Other Central States[2/] | 22 | 180 | -- | 116 | 318 | 140 | -- | 140 | 458 |
| Outside Central States | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 53 | 180 | -- | 116 | 349 | 151 | -- | 151 | 500 |
| Sycamore: | | | | | | | | | |
| Indiana | 907 | -- | -- | -- | 907 | 52 | -- | 52 | 959 |
| Other Central States[2/] | 7 | 142 | -- | 62 | 211 | 48 | -- | 48 | 259 |
| Outside Central States | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 914 | 142 | -- | 62 | 1,118 | 100 | -- | 100 | 1,218 |
| Other hardwoods: | | | | | | | | | |
| Indiana | 244 | -- | -- | -- | 244 | 41 | -- | 41 | 285 |
| Other Central States[2/] | 15 | 196 | -- | 124 | 335 | 100 | -- | 100 | 435 |
| Outside Central States | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 259 | 196 | -- | 124 | 579 | 141 | -- | 141 | 720 |
| All species: | | | | | | | | | |
| Indiana | 2,224 | -- | -- | -- | 2,224 | 208 | -- | 208 | 2,432 |
| Other Central States[2/] | 166 | 2,202 | -- | 1,007 | 3,375 | 1,304 | -- | 1,304 | 4,679 |
| Outside Central States | -- | -- | 1,035 | -- | 1,035 | -- | -- | -- | -- |
| Total | 2,390 | 2,202 | 1,035 | 1,007 | 6,634 | 1,512 | -- | 1,512 | 7,111 |

1/ Production minus exports plus imports
2/ Illinois, Iowa and Missouri

*Figure 4.—Veneer-log production and mill receipts in Central States, 1956-1970.*

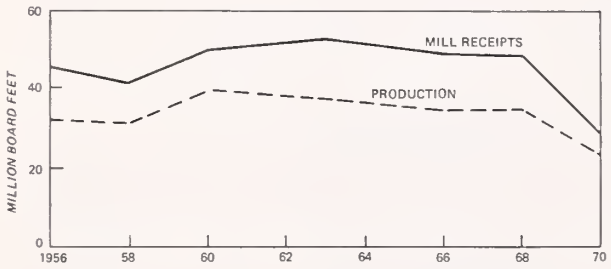


*Table 7.—Disposition of primary plant residue by type and use, Central States, 1970*

*(In percent)*

| Use | Residue | | |
|---|---|---|---|
| | Bark | Veneer cores | Veneer clipping |
| Manufacture of pulp, hardboard, or roofing felt: | -- | 38 | 5 |
| Charcoal or chemical wood: | -- | (1/) | -- |
| Industrial fuel: | 88 | 32 | 91 |
| Domestic fuel: | -- | 23 | -- |
| Small dimension or specialty items: | -- | 4 | (1/) |
| Not used: | 12 | 3 | 4 |
| Total | 100 | 100 | 100 |

1/ Less than 0.5 percent



☆U.S. Government Printing Office, 1972-760-409

*Table 6.—Production and imports of container veneer logs, Central States, 1970*

*(Thousand board feet, International ¼-inch rule)*

| Species and destination | Production | | | | | Imports | | | Central States receipts[1/] |
|---|---|---|---|---|---|---|---|---|---|
| | Indiana | Illinois | Iowa | Missouri | Region total | Other states | Canada | Total | |
| Cottonwood: | | | | | | | | | |
| Indiana | 1,042 | -- | -- | -- | 1,042 | 104 | -- | 104 | 1,146 |
| Other Central States[2/] | 122 | 1,684 | -- | 705 | 2,511 | 1,016 | -- | 1,016 | 3,527 |
| Outside Central States | -- | -- | 1,035 | -- | 1,035 | -- | -- | -- | -- |
| Total | 1,164 | 1,684 | 1,035 | 705 | 4,588 | 1,120 | -- | 1,120 | 4,673 |
| Red and silver maple: | | | | | | | | | |
| Indiana | 31 | -- | -- | -- | 31 | 11 | -- | 11 | 42 |
| Other Central States[2/] | 22 | 180 | -- | 116 | 318 | 140 | -- | 140 | 458 |
| Outside Central States | -- | -- | | | | | | | |

Ginnaty, Thomas P., Jr.

1972. Veneer-log production and receipts, north central region, 1970. N. Cent. Forest Exp. Sta., St. Paul, Minn. 8 p., illus. (USDA Forest Serv. Resource Bull. NC-14)

The 1970 Lake States veneer-log production and mill receipts were 34.4 and 37.0 million board feet, respectively. The Central States produced 23.5 million board feet and received 30.0 million board feet of veneer logs. Veneer-log production and mill receipts dropped substantially throughout the north central region from 1968.

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OXFORD: 832.2:792(77). KEY WORDS: harvest, mill output, import, exports.

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## RECENT REPORTS ON VENEER-LOG PRODUCTION PUBLISHED BY NORTH CENTRAL FOREST EXPERIMENT STATION

Lake States Veneer Log Production Shows Increase in 1965, by Robert G. Knutson, USDA Forest Serv. Res. Note NC-26, 3 p., illus. 1967.

Veneer-Log Production and Consumption, North Central Region, 1966, by James E. Blyth. USDA Forest Serv. Resource Bull. NC-5, 6 p., 1968.

Veneer-Log Production and Receipts, North Central Region, 1968, by Thomas P. Ginnaty, Jr., USDA Forest Serv. Resource Bull. NC-10, 8 p., illus., 1970.

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